Project No. 1: THE COMMON ROOM

In Autumn 2022, I developed — in collaboration with Phoebe Bognár and Mikołaj Rytkowski — a sound installation titled “The common room”. The installation was presented at the festival “Spiegelungen” on the 11th of November 2022. The idea was to unite the three campuses of the Musik Akademie Basel — Jazzcampus, Institut Klassik, and Schola Cantorum Basiliensis —, and to create a shared sound space. Through its interactive design, visitors were encouraged to actively participate in shaping the soundscape, adjusting the mix, and creating novel combinations. By creating a space for the rich and diverse sounds created across the entire campus of the Basel Music Academy, “The common room” offered a unique moment of cross-campus listening.

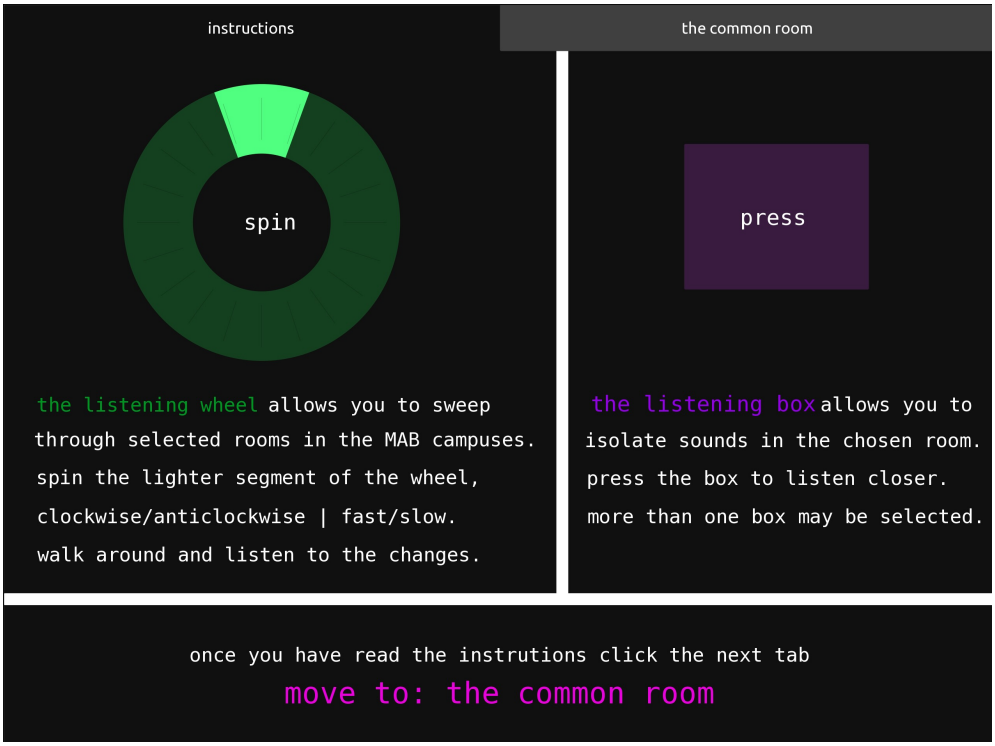

Figure 1: instructions for user interaction

Conceptualisation, Preproduction and Production

The concept of the installation was rather straightforward: consolidating recordings from all three campuses into a single space and providing visitors with interactive tools to manipulate the room's sonic landscape. Months prior to the installation we started with the data collection by capturing audio recordings across the three campuses. We recorded various scenarios, ranging from concerts and rehearsals to noises of the canteens and interviews with students. After gathering the material, I performed preliminary audio processing tasks such as normalisation, compression, and equalisation.

Figure 2: speaker pairs (unfortunately the ceiling speakers aren't visible)

With the material ready, our next step involved devising a strategy to distribute these recordings within the installation space effectively, ensuring an immersive experience without overwhelming the visitors. We decided for a multichannel system comprising four pairs of standing speakers facing outwards (see Figure 2). Additionally, we used the two ceiling speakers that the room provided, bringing the total to ten speakers.

We organised our recorded audio material into four groups:

I. Jazzcampus
II. Klaus Linder Saal (a concert hall at the Institut Klassik)
III. Kleiner Saal (a concert hall at Schola Cantorum Basiliensis)
IV. Grosser Saal (a concert hall at the Institut Klassik)

Each group consisted of five stereo audio files, each of them allocated to one speaker pair, including the ceiling speakers. In order to avoid cacophony, we carefully selected the audio files that work together well inside of the individual groups, and designed seamless loops.

For the interactive component we used an iPad running a TouchOSC file, which communicated wirelessly with a computer running Ableton Live. As illustrated in Figure 1, the first page provided instructions for user interaction, while the second page (Figure 3) contained the actual interactive device.

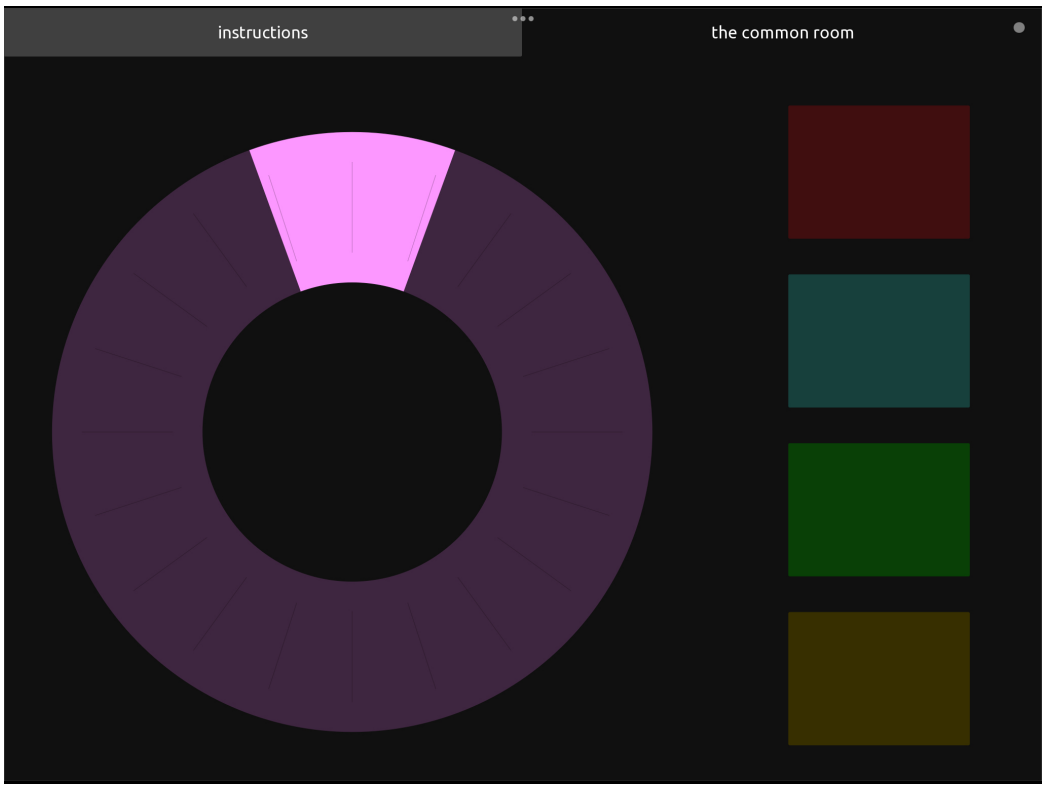

Figure 3: interactive TouchOSC patch

Playback and Programming

I was in charge of selecting the appropriate technology and environment for the playback and interactive components of the installation. The playback of audio files was managed using Ableton Live, while for the interactive iPad interface, two custom Max4Live patches were developed.

As depicted in Figure 3, users were able to navigate between the four groups by turning the big encoder. The output was transmitted via TouchOSC Bridge to the computer, where it was mapped to a slider in the “JA_spiegelungenRoomEncoder” patch (see Figure 4). This moving slider continuously triggered the process of interpolating between the four rooms, by executing the json file that was loaded in the *pattrstorage* (visual representation of the interpolation (*multislider*) can be observed in Figure 4). The output, which was between 0. and 1., was scaled to dB values before being sent to *live.gain* objects that were positioned as the last effects on individual tracks. Each of the four sliders controlled the tracks within one of the aforementioned groups.

The patch was designed to ensure that the speed at which the encoder was turned did not affect how quickly the listener transitioned between groups. Upon reaching a new room, a *gate* object temporarily halted the incoming encoder signal for 200 *bangs*, ensuring that regardless of the user's turning speed, they remained within the same group for a certain amount of time. Simultaneously, upon entering a new room, a control message was sent from the patch to the TouchOSC program on

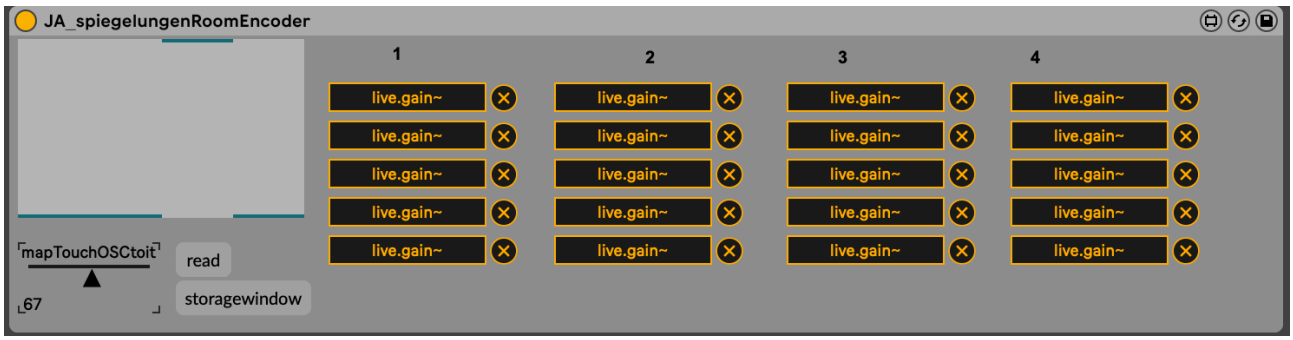

Figure 4: 1st custom Max4Live device

the iPad. This action displayed the name of the current room on the screen, notifying the user that they had “arrived" in a new sound environment.

As depicted in Figure 2, there were four listening spots, each identified by different colours, and each with a dedicated speaker pair. To isolate a particular speaker pair, visitors could press one of the four designated “listening boxes” (see Figure 3). These boxes were linked to the four toggles in the second custom Max4Live patch, labeled “JA_spiegelungenVolCtrl" (see Figure 5). The patch was designed so that when a toggle was pressed, the volume increased on all tracks routed to that specific speaker pair, while simultaneously reducing the volume in all other speaker pairs. If multiple toggles were activated, the volume increased on all selected pairs. It's worth noting that the ceiling speakers remained unaffected, as they carried a subtle ambient signal such as applause or muffled percussion simulating sounds from adjacent rooms.

Appendix

Here you can find a demo video showcasing the interactive TouchOSC patch and the Ableton Live session. In the video description section you can download the two custom Max4Live patches. Please note that the demo video is downmixed to stereo, which doesn’t result in a representative sound image of the installation. Additionally, please ensure to *read* the included file “JA_preset.json” in the “JA_spiegelungenRoomEncoder” patch for proper functionality.

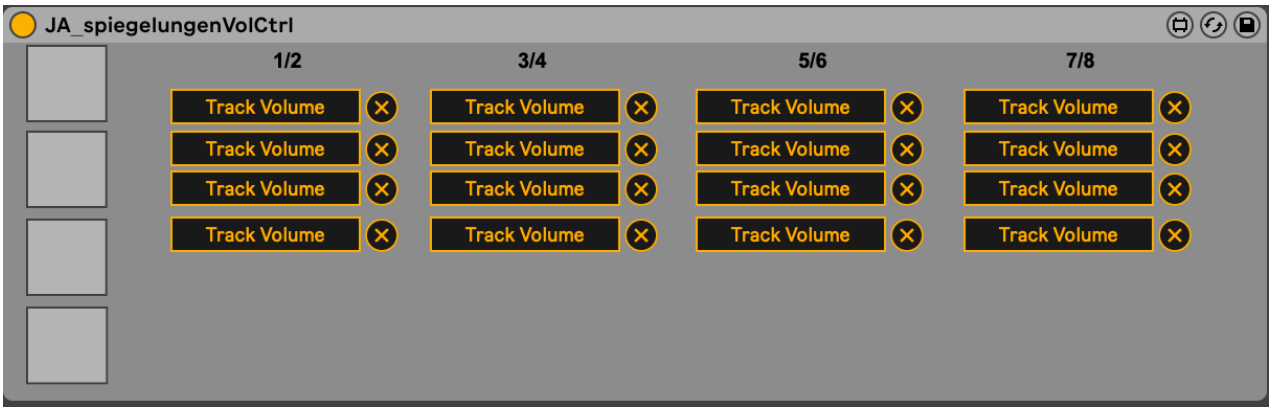

Figure 5: 2nd custom Max4Live device